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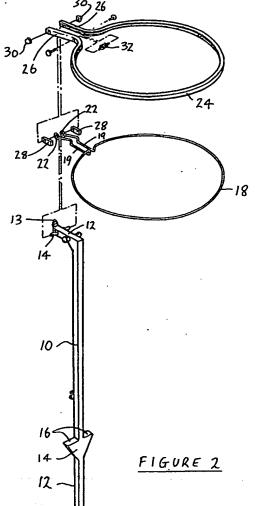
(56) Documents cited GB 2142896 A US 4562983 A US 3773286 A US 3180384 A

GB 0569320 A US 4702445 A US 4312489 A US 4378924 A US 3879160 A US 3532314 A

(58) Field of search UK CL (Edition J) B8C CM INT CL B65B

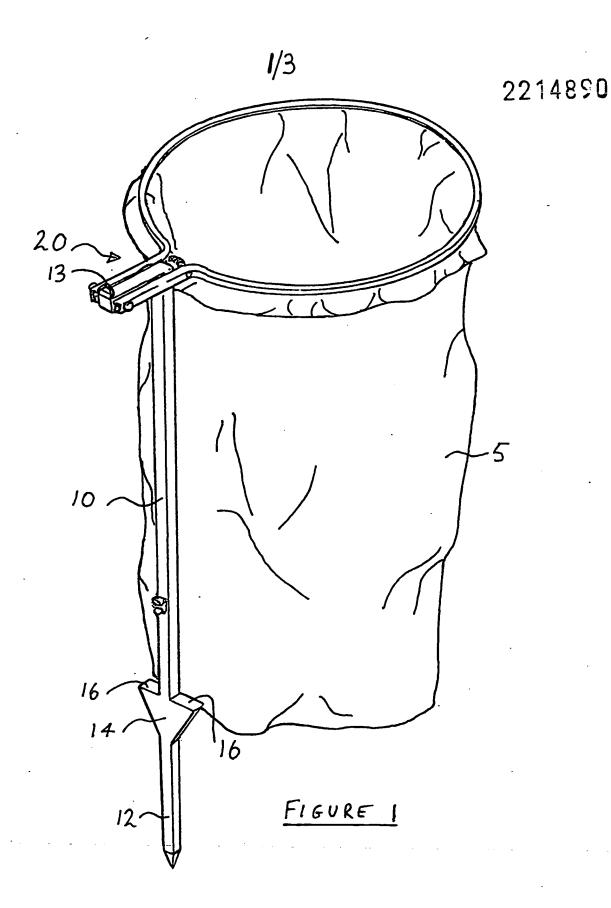
#### (54) A portable waste bag holder

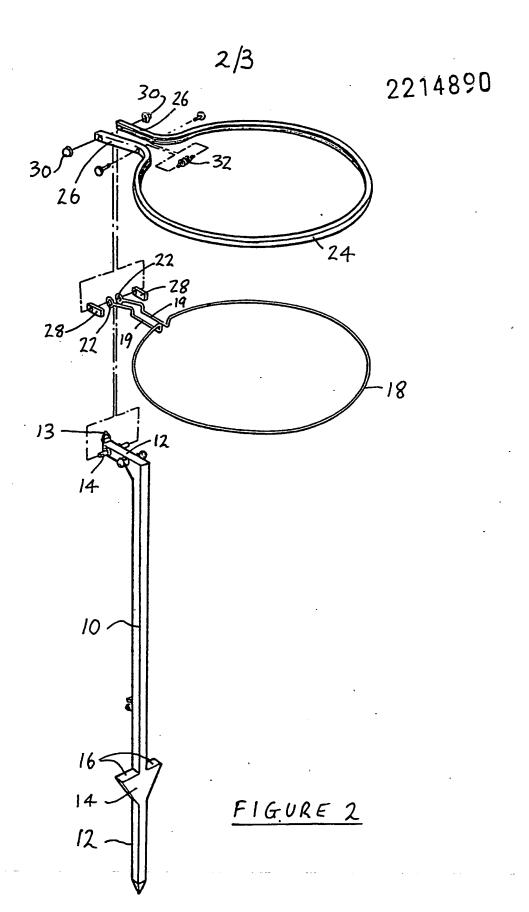
(57) A portable holder for a waste bag, e.g. a plastics bin liner, comprises an upright support 10 which may be spiked into the ground, and an arrangement 20 for holding the bag around its open top end to keep it open in the form of two ring elements 18, 24 which can be pivoted upwards, backwards and then downwards to lay flat against the rear of the support 10 for transport. The second ring 24 is of channel-shaped section and receives the first ring after a bag mouth has been folded over the latter.

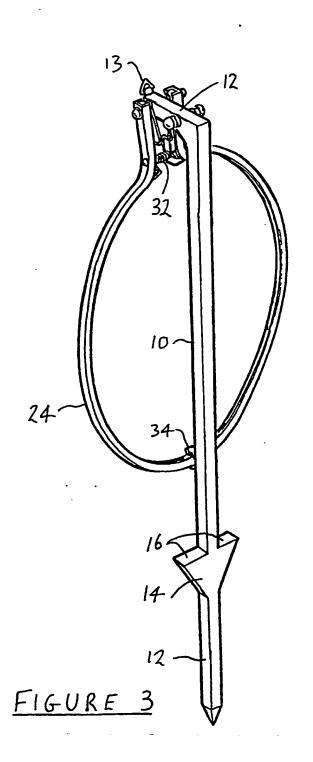


214 890

At least one drawing originally filed was informal and the print reproduced here is taken from a later filed formal copy. The claims were filed later than the filing date within the period prescribed by Rule 25(1) of the Patents Rules 1982.







#### WASTE BAG HOLDER

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This invention relates to a waste bag holder for occasional use, such as on picnics, at barbeques, or when gardening etc.

There is often a need for a convenient container in which to place discarded wrappings etc. A plastics waste bag, e.g. of the bin liner type, is a convenient container but can cause difficulties in opening it up or keeping it open so that waste can be put into it readily.

I have now devised a waste bag holder which overcomes these difficulties. In accordance with this invention, there is provided a portable holder with an arrangement for holding a waste bag open around the circumference of its upper end, the holder further comprising an upright support for spiking into the ground.

Thus, the holder forms a portable utility which preferably can be folded flat for transport, yet the upright support can be spiked into the ground readily and the waste bag is supported in open condition when fitted to the holder. Instead, the waste bag can be fitted to the holder but the support left lying flat on the ground instead of being spiked into the ground. In this way the bag lies on its side on the ground with its top held open and ready to receive waste: for example during gardening leaves etc. can be swept straight into the open bag.

Also in accordance with this invention there is

provided a waste bag holder comprising a first ring element for encircling a waste bag adjacent the top of the latter, and a second ring element for encircling the first ring element once a top margin of the waste bag has been folded down over the first ring element, one of the ring elements being formed of channel-section with its channel facing the other ring so as to receive the latter.

In use, the top margin of the waste bag is trapped into the channel section of the one ring element by receiving the other ring element. The waste bag is thus held very firmly in place.

An embodiment of this invention will now be described by way of example only and with reference to the accompanying drawings, in which:

FIGURE 1 is a perspective view of a waste bag holder in upright position and with a waste bag engaged to it;

FIGURE 2 is a view of the waste bag holder with its components, separated so as to illustrate details of construction; and

FIGURE 3 is a view of the waste bag holder folded up for transport.

Referring to Figure 1 of the drawings, there is shown a portable holder for a waste bag 5, e.g. plastics bin liner. The holder comprises an upright support 10 formed with a pointed lower end 12 for spiking into the ground. The support is formed with a triangular enlargement 14 providing shoulders 16 so that the support can be urged into the ground pushing on a shoulder 16 with the user's foot. At its upper end the support 10 mounts an arrangement 20 for holding the bag 5 around its upper end and keeping the bag open. In use the support 10 may be spiked into the ground so that the bottom of the bag rests on the ground.

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Figure 2 shows the details of construction of the bag holding arrangement which is mounted to the top of the support 10. The top end of the support 10 is formed with a short arm 12 projecting rearwardly from the support at right angles to it, so as to extend generally horizontally in use. At its outer end, the arm 12 is provided with a hook 13 for hanging up the holder when not in use. A pivot pin 14 extends through the arm 12 adjacent its outer end and a pair of support pegs 16 project from either side of the arm 12 adjacent its junction with the top end of the support 10.

The bag holding arrangement further comprises a ring element 18 formed of a length of wire having its opposite ends 19 bent to extend radially outwards parallel to each other and formed into loops 22 which are engaged over the pivot pin 14 on opposite sides of the arm 12. The wire ring 18 can thus be pivoted about the pin 14 and when pivoted forwardly to the horizontal position shown in Figure 2 it will be supported in this position by its ends 19 resting on the pegs 16 of the arm 12.

The bag holding arrangement further comprises a ring element 24 formed of a length of channel-section (or U-section) plastics extrusion. This is curved into circular shape with the channel facing radially inwards, and its opposite ends 26 bent to extend radially outwards parallel to each other. These ends 26 of the ring element 24 are formed with holes engaged over the pivot pin 14, with elongate plates 28 also engaged over the pin 14 and received within the channel section of the ring ends 26 and with fasteners 30 engaged over the pin 14 to hold the two ring elements on. Finally a tension spring 32 is connected between the two end portions 26 of the channel section ring element 24 adjacent their inner ends, bringing the end portions 26 towards each other.

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As shown in Figure 3, normally the wire ring element 18 is engaged within the open channel of outer ring element 24. Both ring elements may be pivoted upwards, rearwards and then downwards about the pin 14 until they hang downwardly against the rear of the support 10. A clip 34 is provided on the support 10 for holding the ring elements to the support.

Then in use of the holder, firstly the support 10 is spiked into the ground. Then the ring elements are disengaged from the clip 34 and pivoted upwards and over to the front about the pin 14, until the two rings are in the horizontal position with the wire ring 18 supported on the pegs 16. The channel-section ring 24 is then pulled outwardly against the force of the spring 32 to disengage it from the wire ring 18, and then pivoted upwards. Next the waste bag is brought into position by passing its upper end upwards through the wire ring 18, then folding an upper margin of the bag outwardly and downwards over the ring 18. Finally the channel-section ring 24 is pivoted back down to the horizontal position, encircling the wire ring 18 and trapping the folded over margin of the waste bag between the two rings and into the channel of the outer ring 24 as the spring 32 again closes the ring 24 about the wire ring 18.

The waste bag is now held firmly in the holder, with its top held open to receive waste readily. After use, the bag is removed from the holder and closed in the usual way, whilst the holder is folded back into the configuration shown in Figure 3.

Instead of being spiked into the ground, the holder may simply be laid flat on the ground as previously described. The holder may indeed be modified intentionally for laying flat on the ground, in which case it would exclude the spike.

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#### CLAIMS

- 1) A portable waste bag holder having an arrangement for holding a waste bag open around the circumference of its upper end, the holder further comprising an upright support for spiking into the ground.
- 2) A portable holder as claimed in claim 1, which can be folded flat for transport.
- A portable holder as claimed in claim 1 or 2, in which the arrangement for holding the waste bag comprises a first ring element for encircling the waste bag adjacent the open top of the latter, and a second ring element for encircling the first ring element once a top margin of the waste bag has been folded down over the first ring element, one of the ring elements being formed of channel section with its channel facing the other ring so as to receive the latter.
- 4) A portable holder as claimed in claim 3, in which the two ring elements can be pivoted upwards and backwards and downwards to lay flat against the upright support for transport.
- A waste bag holder comprising a first ring element for encircling the waste bag adjacent the open top of the latter, and a second ring element for encircling the first ring element once a top margin of the waste bag has been folded down over the ring element, one of the ring elements being formed of channel-section with its channel facing the other ring so as to receive the latter.
- 6) A waste bag holder as claimed in claim 5, in

which the two ring elements are pivoted to a support and can be pivoted upwards and backwards and downwards to lay flat against the support for transport.

7) A waste bag holder substantially as herein described with reference to the accompanying drawings.

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